# MIDDLE EAST WATERSHED MONITORING AND EVALUATION PROJECT PASA # PCE-P-00-01-00011-00 ANNUAL REPORT for 2005

January 15, 2006

## **Section I: Technical Progress**

This is the fifth Annual Report of the Middle East Watershed Monitoring and Evaluation Project for the year 2005. All technical and financial reporting is coincident with the annual cycle of the project as outlined in the May 29, 2001 guidance. Additionally, this report details further research efforts by project participants that compliment the USAID/MERC-funded initiatives through financial support by the USDA Forest Service and the U.S. Department of State.

## 1. Research Objectives:

## a. Specific Project Objectives:

- i. Monitor and evaluate the effectiveness of watershed management practices in preventing erosion and increasing the efficiency of water use in arid and semi-arid watershed pilot programs,
  - Monitor the effects of these practices through measurement of vegetation, hydrology, and erosion and sedimentation data,
  - Evaluate the monitoring tools used to assess treatment effectiveness,
- Evaluate the biophysical measurements appropriate for evaluation of operational watershed management practices implemented for erosion control and biomass production in arid and semi-arid regions,
- iii. Demonstrate effective practices for forest and grassland management using pilot watershed programs.

## b. Specific Objectives for Year Five:

- i. Continue the on-going monitoring program underway in all participating countries,
- ii. Hold a final International Study Team (IST) workshop,
- iii. Conduct trainings between West Bank and Israeli partners,
- iv. Collect final study results from each country and formulate final project report.

#### 2. Research Accomplishments:

Each country continued collection of data at their study sites and is currently analyzing this date for the final report. 2005 data, as well as an analysis of this data and relevant conclusions, as they pertain to project objectives will be addressed in the final project report.

## 3. Scientific Impact of Cooperation:

During year five, strong collaboration continued between participants:

- During the IST workshop convened in Cyprus in October 2005, participants shared scientific findings and preliminary conclusions with each other. This dialogue exposed country teams to previously unknown analytical methods for their data.
- A MERC researcher from Jordan, who earned her Master's degree through MERC-related research, attended the IST to present her thesis.
- A Master's student from the West Bank presented his thesis during the IST in Cyprus.
- In February of 2005, three graduate students from the West Bank attended a training course at the Jacob Blaustein Institute for Desert Research, Sede Boquer Campus in Israel. The focus of the training was water harvesting and covered topics that included: agroforestry, remote sensing, biodiversity, and methods and instruments for data collection.
- In May of 2005, two graduate students from the West Bank attended a training course at the Jacob Blaustein Institute for Desert Research, Sede Boquer Campus in Israel. This course becaused on remote sensing technologies applicable to the Watershed Monitoring and Evaluation Project.
- Israel and the West Bank initiated development of a training program for 2006 that will include similar exchanges to those conducted in 2005, focusing on statistical analysis of data, soil analysis, data collection techniques, and other related issues.

#### 4. Description of Project Impact:

The collegial dynamics at the IST in Cyprus highlighted the improved collaboration and cooperation between country teams, both on a professional and personal level. Plans to continue collaborative efforts, post-MERC funding, were enthusiastically supported by country participants at the IST in Cyprus.

## 5. Strengthening of Middle Eastern Institutions:

- a. In 2004, project partners visited the U.S. to participate in USFS-sponsored seminars and study tours related to watershed management. The PI for the Palestinian research team was invited to participate as an instructor in the 2006 USFS international seminar on watershed management at the University of Wisconsin. The PI, Dr. Salama, previously participated in the 2004 seminar and study tour.
- b. The Jordanian team began a new research initiative in the Marab Hassan watershed. The research initiative builds on techniques and understanding gained through their participation in the MERC project.
- c. The IST workshop held in Cyprus during October 2005 led to capacity building among participants through sharing of scientific findings and methods of analysis.

d. Partners in Israel and the West Bank have begun development of a training regimen for Hebron University graduate student exchanges at the Jacob Blaustein Institute for Desert Research.

## **Section II: Project Management and Cooperation**

## 1. Managerial Issues:

There were no managerial issues to report in 2005.

## 2. Special Concerns:

- As mentioned in the 2004 report, the West Bank study team was unable to access their study site at Zeif during the initial three years of the MERC study. Beginning in 2004 regular access to the site occurred, data collection has been on-going, and will continue through 2006.
- The international study team hopes to finalize the details of future training exchanges that are both feasible and beneficial for the West Bank and Israel and will also propose a no cost extension to complete their research in the West Bank.

#### 3. Cooperation, Travel, Training, and Publications:

- In October of 2005, IST members traveled to Cyprus for the fifth annual IST workshop.
- Five students from Hebron University in the West Bank participated in two specialized training workshops at Ben Gurion University and the Desert Research Center.
- Two graduate students (one in Jordan and one in the West Bank) completed their final research efforts in 2004 and presented their thesis research at the IST in Cyprus.
- One graduate student from the United States finished research in support of his thesis on MERC-related activities. The thesis is planned for completion in 2006.

## 4. Request for USAID actions:

On December 14, 2005, the USFS requested a no-cost extension from USAID. Supplementary materials supporting this request, including a training plan for 2006, will be submitted in February 2006.